



**Nov. 16, 2023**

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AND

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Dear Ms. Barden/Ms. Golden:

The Wastewater Advisory Committee to the MWRA (WAC) appreciates the opportunity to provide comments to the US EPA Region 1's draft National Pollutant Discharge Elimination System (NPDES) permit issued to the Massachusetts Water Resources Authority (MWRA) Deer Island Treatment Plant and CSOs (MA0103284), and to the Massachusetts Department of Environmental Protection (MassDEP).

We particularly want to thank EPA for the additional time to comment.

WAC thanks EPA for some of the modifications adopted in this draft. However, WAC believes some of the new provisions are not beneficial to the environment, EPA, MWRA or the public at large. Several are also impractical.

WAC is a citizens' advisory committee to the MWRA on wastewater issues. Our volunteer members are drawn from various sectors to provide an independent forum for discussion of anything relating to wastewater, the MWRA's system, or our local environment.

WAC strongly endorses the goals of the Clean Water Act and EPA. The cleanup of the Boston Harbor, and Mystic, Neponset, and Charles rivers are significant achievements of the 2000 NPDES permit, and have resulted in economic and recreational growth around these water bodies. Looking forward, WAC has urged the MWRA to plan further for climate resilience, supported its efforts to improve its energy efficiency, and increase its generation of renewable, green energy. Also central to WAC's mission is advocating for maintenance, increased investment in removal of inflow and infiltration from municipal systems (which directly ties to *WAC is a citizens' advisory committee to the MWRA on wastewater issues. We provide an independent forum for discussion of these matters. Environmental improvement, safety, cost and technical issues are all considered when formulating our recommendations.* **1** | Page

energy usage), targeted reductions in Combined Sewer Overflow (CSO) discharges and more. WAC submits its comments in the hope that they will help EPA improve the permit, and to meet WAC's charge to communicate wastewater issues to the public.

**I. WAC thanks EPA for the following aspects of the draft permit:**

When the 2000 Deer Island permit was issued, there were many uncertainties about the treatment plant's innovative, unique design, including the newly-situated outfall, 9 miles out to sea, and the effect this new infrastructure would have on the environment. There were also worries about how reliable the new system would be, and whether MWRA would revert to the underfunding of maintenance that characterized the previous entity's management of the sewers and treatment systems.

After more than 20 years of operation, ambient monitoring, science advisory panels and other attention, MWRA has demonstrated that operation of the plant does keep effluent quality high (it just received the NACWA Platinum 16 award), and that the environment has not been adversely impacted by this innovatively designed outfall into Massachusetts Bay. In part because of WAC's ongoing attention, MWRA continues best practices in maintenance of the facility and collection system. The MWRA now has a proven track record of reliable and continuous operation of its wastewater system.

WAC therefore thanks EPA for removing the following from the 2023 draft permit:

- a. **The "Contingency Plan"**: This rapid reporting and response requirement was designed to allow for a quick decision to relocate the discharge to Boston Harbor should the outfall prove harmful to Massachusetts Bay. Twenty years of monitoring has detected no adverse environmental impact from the outfall. Discharging closer to shore is potentially harmful, and WAC agrees with EPA that the Contingency Plan should be eliminated.
- b. **Web reporting and repository library**: The former is highly useful, and the public currently has full access via the web or via a library web portal. The hard-copy versions of MWRA reports do not get touched. WAC is pleased EPA recognizes this and has removed this part of the requirement.

WAC thanks EPA for not making the following monitoring parameters unnecessarily stringent:

- c. **Nitrogen limits**: WAC supports continued monitoring of nitrogen levels in effluent and receiving waters. For one, it is a helpful parameter to environmental scientists tracking the plume. To date, the Outfall Monitoring Science Advisory Panel (OMSAP) and MWRA have been unable to establish a harm even when their models double the amount of nitrogen than is allowed in the 2000 permit. A removal requirement or limit on nitrogen would add energy and chemical costs, and thus higher greenhouse gas emissions, to the processes at Deer Island without a commensurate environmental improvement in Massachusetts Bay. WAC thanks EPA for not implementing a new limit on nitrogen.
- d. **Enterococcus limits**: WAC is pleased the newly added *Enterococcus* limit is seasonal. WAC supports continued ambient monitoring and testing for *Enterococcus*. WAC also supports use of a multiplying factor to account for the

unique characteristics of MWRA's outfall, including a long outfall tunnel and a series of diffusers that discharge the effluent approximately 100 feet beneath the ocean surface into the usually stratified Massachusetts Bay. The plant at Deer Island uses a unique deep-water discharge nine miles out to sea. Over the final 6,600 feet, this discharge includes more than 50 pipes, each of which terminates to a diffuser cap dividing the flow again into numerous streams. This results in an initial dilution of effluent into the Bay of 100 to 1. WAC thanks EPA for not requiring an overly-stringent year-round *Enterococcus* limit. This avoids increases in emissions from additional truck deliveries of chemicals to Deer Island and possibly higher effluent toxicity.

WAC thanks EPA for once again including in the permit:

- e. **Public Outreach Requirements:** specifically, the dissemination of household hazardous waste booklets and school outreach programs. WAC feels these are some of MWRA's most effective programs to limit Contaminants of Emerging Concern from the effluent.

## II. Permit changes that need amendment

- a. **Ambient monitoring:** Continuing to monitor trends in Massachusetts Bay is useful on many levels to a number of constituents, and WAC supports continued monitoring in some form. It is essential that the requirements for the monitoring plan include a mechanism for amending the plan. The plan needs to be responsive to changes in science, as the past 20 years demonstrated, and in light of rapid environmental changes due to climate change. Under the current, expired permit, the Outfall Monitoring Science Advisory Panel (OMSAP) provided a critical means for amending the monitoring plan. If EPA wants to discontinue OMSAP, WAC urges EPA to find another, equally or more flexible, vehicle for amending the ambient monitoring plan.
- b. **Harmful Algal Blooms (HABs):** WAC shares EPA's view that there are good reasons to monitor nuisance algal blooms and HABs in Massachusetts Bay, particularly considering surprises in their occurrence in recent decades that were not central concerns at the time the original ambient monitoring plan was conceived. EPA has agreed that the outfall does not appear to cause or amplify nuisance or HABs near the outfall or in the Gulf of Maine. Therefore, WAC asks EPA why it is requiring HAB monitoring with rapid-response reporting as part of this discharge permit. Specifically:
  - i. WAC supports continued monitoring for *Alexandrium catenella* (red tide).
  - ii. WAC supports regular annual reporting and routine monitoring of *Pseudo-nitzschia spp*, as is currently the practice under the current permit. WAC is of the understanding that testing for *Pseudo-nitzschia spp*. requires much longer turnaround—easily a month—to count the cells in a sample (unlike with *Alexandrium* there is not a faster, DNA-probe test available yet.). This test is not yet ready for a rapid response reporting requirement at the frequency that EPA suggests. Therefore, we ask that this rapid response

requirement be removed or modified. Additionally, WAC requests that the threshold for when a *Pseudo-nitzschia* rapid test be required be raised to the threshold used by the Mass. Division of Marine Fisheries (DMF), currently 30,000 cells/L.

- c. **OMSAP:** In the 2000 permit, EPA established the Outfall Monitoring Science Advisory Panel. This all-volunteer board of scientists reviewed data related to the outfall and answered many of the questions that existed at the time the 2000 permit was issued. As these questions were settled, the OMSAP provided a science-based method for modifying the ambient monitoring plan between permits.
  - i. WAC agrees that few concerns remain about the outfall, but we strongly support retention of OMSAP, its valuable data and work.
  - ii. WAC asks EPA who the body reviewing monitoring reports in the absence of an OMSAP would be. EPA? WAC feels OMSAP, as they have demonstrated in these past 20 years, is best situated to serve as the body reviewing the monitoring reports.
  - iii. WAC notes that the Public Interest Advisory Committee (PIAC) to the OMSAP, of which the WAC is a member, is a valuable mechanism to ensure transparency about the OMSAP's work and EPA's requirements. It alleviates public worry and tamps down misinformation about the role of the outfall or MWRA in changes the public may see to the Harbor and the Bay. We agree with the chair of PIAC that this committee should be retained in the permit.
  - iv. If not OMSAP, WAC supports a Science Advisory Panel to review Massachusetts Bay and Gulf of Maine data more generally. WAC asks that EPA ensure:
    - a. An appropriate funding mechanism that is shared—not borne by MWRA alone
    - b. An appropriate and qualified implementing entity(ies)
- d. **Development of a New Ambient Monitoring Plan**
  - i. Time to Create a New Plan—The monitoring plan in the current permit took well over a year to develop, and included input from the general and scientific community. While EPA removes some requirements from the plan, developing a thoughtful new plan will take longer than the 30 days envisioned in the current draft permit. WAC urges EPA to ensure that the permit language allows ample time for a thoughtful and public process to develop the next monitoring plan.
  - ii. It is not clear whether MWRA is to create a new plan or whether EPA is doing so via the permit.
  - iii. WAC suggests a Memorandum of Understanding may be a better vehicle for the specifics of the new monitoring plan, rather than the permit, as this allows both parties more flexibility.

- e. **Blending provisions, including a reporting requirement:** WAC supports allowing MWRA to blend effluent when plant capacity (700mgd process limit) is exceeded during wet weather. This ensures the continued proper operation of the plant. Note that MWRA has met the 2000 permit limits even when blending. WAC believes that, when possible, excess flow should continue to be directed to the plant, not into CSOs or SSOs, where it might cause far more harm. Without the ability to blend, or bypass secondary treatment facilities, EPA changes MWRA's incentive to move more flow toward the plant. The 2000 permit and the July 2008 Boston Harbor Court stipulation language both direct that the plant blend rather than cause upstream overflows. WAC urges EPA to clarify this provision in the new permit.<sup>1</sup> WAC supports the reporting requirements when blending occurs, as outlined in the draft permit
- f. **PFAS Testing:** WAC supports testing influent, effluent, and residual solids for PFAS. However, testing methods are still evolving, and there are a limited number of labs prepared to conduct these tests.<sup>2</sup> MWRA and other utilities will need the flexibility to adopt the latest and best PFAS testing approaches as these protocols further evolve. WAC also notes the danger of requiring a test that does not detect the substances at a useful level. In light of the long, and growing, list of PFAS compounds, WAC appreciates EPA also considering a broader approach to quantifying organofluorine contamination. However, at this stage, a few concerns about the Adsorbable Organic Fluorine requirement remain: namely: the scarcity of labs prepared to quantify this parameter, cost, and whether this method has been fully vetted by EPA.
- g. **Visual/Video Inspection Requirement of the Outfall:** WAC is unclear what exactly is meant by this requirement and if compliance is possible. Unlike some wastewater systems, Deer Island's 9-mile outfall is in a deep rock tunnel, and

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<sup>1</sup> "Maximization of flow to the POTW for treatment. It is recognized that most of the actions recommended for maximization of the collection system for storage will also serve to maximize flow to the POTW. In addition to optimizing those controls to maximize flow to the POTW, the following specific controls should be evaluated and implemented where possible;

a. Use of off-line or unused POTW capacity for storage of wet weather flows.

b. Use of excess primary treatment for treatment of wet weather flows. If the use of excess primary capacity will result in violations of the community's NPDES permit limits, the community shall get approval of the proposed bypass from the permitting authority prior to implementation." (DITP 2000 NPDES Permit, attachment M, paragraph 4).

#### "3.1.1 Treatment Process Description

The DITP is a secondary treatment facility with chlorine disinfection and dechlorination. Influent enters the Facility from the North and South Systems and flows through the primary clarifiers A-D, followed by three batteries of secondary treatment and then the final clarifiers. During high flows, primary treated flows, in excess of 700 MGD, may bypass the secondary batteries and final clarifiers and then be added back to main treatment train. All flows are combined prior to disinfection and dechlorination before discharge to Massachusetts Bay." (Fact Sheet, p 21)

<sup>2</sup> May 5, 2023 MWRA comment on draft NPDES permit for Billerica (MA010711) "MWRA is concerned that monitoring of Adsorbable Organic Fluorine (AOF) is untested and the data may be impossible to interpret...the method is not ready for use in NPDES monitoring." p 1-2.

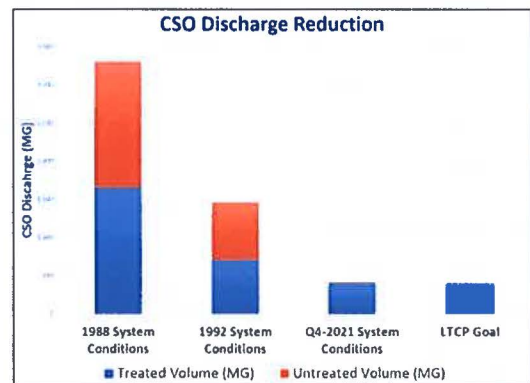


therefore is unharmed by dredging efforts, anchors, or silt buildup on the sea floor. The 53 diffusers sit on the ocean floor approximately 100 feet below the surface. One of the 53 active diffusers is regularly visually inspected on a three-year cycle as part of benthic monitoring, which in this draft permit is discontinued. MWRA can detect issues with the outfall by comparing its measurements of actual outfall performance to theoretical performance based on hydraulic modeling, which could be considered a more sensitive measure than visual inspections. MWRA also asserts that an internal inspection of the outfall is not possible, particularly since it must always be on-line. It would be a significant undertaking and monetary cost to video inspect all the diffuser caps. Therefore, any such requirement would have to provide a great deal of flexibility, for instance, requiring each diffuser head be video inspected once within a 20-year period.

### III. Permit changes that raise serious concerns

a. **Combining CSO Permits** into the Deer Island Permit: WAC understands that EPA Region 1 would like to simplify the permitting process by bringing various NPDES permits together into one general permit. The result here, however, is anything but simple.

i. The Authority complies with both state overflow reporting requirements as well as several requirements in court orders and variances. Since the MWRA CSO Program commenced in 1988, the Authority has reduced CSO volumes by over 87% or 2.8 billion gallons in the Typical Year.



- ii. While this is short of the Long-Term Control Plan, the MWRA continues work on reducing CSOs at 10 of the 16 outfalls that do not meet LTCP goals.
- iii. Years of water quality data show that the remaining bacterial issues in the Alewife Brook, Charles and Mystic rivers are upstream of municipal and MWRA CSO outfalls, suggesting a need to tackle stormwater issues via the Municipal Separate Storm Sewer System (MS4) permits or by exercising EPA’s residual permitting authority (stormwater pollution from development & parking lots), as has been suggested for the Charles, Neponset, and Mystic rivers and the Inner Harbor.
- iv. In the draft permit the addition of municipal CSO permits to the MWRA CSO permit leaves MWRA and the communities vulnerable to third-party legal actions as noted below in our discussion of co-permittees. As it stands, MWRA and the CSO communities collaborate closely to control overflows. While noting this in the permit is possibly harmless, adding the appearance of co-responsibility is not. **WAC asks EPA to remove co-permittees from this permit.**

- v. Additionally, putting all CSO activities into this one permit makes it difficult to adapt projects if a new direction might be more feasible, affordable, or better for the environment.
  - vi. The MassDEP variances and Court orders that created MWRA's Long Term Control Plan (LCTP) were able to keep planning current as court requirements changed. In this draft permit, EPA includes variance language, although MWRA is in the process of securing another variance. This could lead to the EPA permit conflicting with the variance or future changes made by the Court. MWRA is required to be in compliance with both. How would they do that?
    - 1. **WAC asks that all CSO language be removed from this permit, and that EPA retain control of CSO through its current mechanism.**
- b. **Co-permittees:** MWRA and its communities currently enjoy a cooperative relationship. Neither the communities nor the Authority want to be responsible for work they do not directly control or oversee.
- i. WAC has several concerns with the co-permittee structure, and requests that EPA not include this in the permit for the reasons outlined below:
  - ii. **Liability:** WAC understands that EPA does not intend for MWRA or the communities to take on each other's responsibilities, and that the co-permittee language is meant only to facilitate better planning.
    - 1. However, EPA does not account for the danger of third-party court action and liability. The MWRA has recently been entangled in legal and financial complexities from the Cross-Harbor cable, which was improperly laid in the 1990s by another entity, over which MWRA had no control. But because it was named a co-permittee, MWRA has had to spend tens of millions of rate-payer dollars to correct flaws incurred by the second entity.<sup>3</sup> MWRA is not a power utility, and paying for the cable to be re-laid consumed funds that WAC believes would have been better spent on sewage treatment, inflow and infiltration reduction, or cutting MWRA's greenhouse gas emissions.
    - 2. If lawyers for MWRA or the MWRA Advisory Board can find language that would better shield the Authority and the 43 sewer communities from third-party lawsuits, WAC would support that. If not, WAC asks that EPA remove all co-permittee language from this permit.
    - 3. MWRA and communities should not spend scarce resources on lawsuits that could instead be used to meet the goals of the Clean Water Act.

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<sup>3</sup> <https://www.justice.gov/opa/pr/united-states-settles-lawsuit-over-electric-cable-boston-harbor>

iii. **Inflow & Infiltration:** EPA and DEP understandably want MWRA to exert more control over Inflow and Infiltration (I/I). I/I is also a central focus for WAC, particularly since approximately 40% of Deer Island’s influent is I/I. WAC appreciates EPA exploring new ways to reduce I/I and wants them to continue to do so. WAC’s concern is that the co-permittee mechanism could compromise a superior wastewater service by requiring MWRA to be a regulator.

1. The EPA or DEP should remain the entities that enforce, and allow MWRA to continue its collaboration with the 43 sewer communities, and to help with planning and funding the work.
2. WAC further notes that some communities do not have the in-house capacity to plan such projects, much less supervise them. Many also struggle with paying for the work, despite MWRA grants and loans. If EPA wants more aggressive I/I removal, then technical expertise from EPA or DEP and a better funding mechanism than MWRA grants is needed from state and federal sources, as communities are constrained by state tax legislation.
3. **I/I Task Force and regional plan:** Created as a result of the 2000 permit, this plan, WAC feels, is a better model than the co-permittee structure (discussed above). WAC staff co-facilitated the work of the Task Force, since disbanded, and the plan remains active in MWRA communities and for the Authority. Removal of I/I is essential to minimizing sewer overflows and will be increasingly important as storms intensify consequent to climate change. A cooperative relationship between the MWRA and its customers is necessary to making this plan work.

The I/I regional plan, possibly amended and strengthened, is a proven mechanism for I/I reduction. According to MWRA’s records:

“The estimated average daily flow reduction associated with completed local I/I reduction projects that have received MWRA financial assistance is about 101 million gallons per day (mgd). This flow reduction ‘ballpark’ figure is based on the communities’ (or their consultants’) peak I/I reduction estimates, which have been prorated by MWRA staff to estimate an annual average I/I reduction. The estimated I/I reduction represents groundwater and stormwater that no longer enter the collection system at the point of sewer repair.”<sup>4, 5</sup>

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<sup>4</sup> <https://www.mwra.com/harbor/pdf/infinf22.pdf>, page 4-6

<sup>5</sup> <https://www.mwra.com/harbor/pdf/infinf23.pdf>



- c. **Part I.E.2.e.1 Operations and Maintenance (O&M) Plan**—WAC expects MWRA may be able to comply with all parts of this section, with the exception of the *Major Storm and Flood Events Plan* (details below). But WAC is concerned that communities do not have the staff capacity, the budgets, nor the time to allocate funds, clear them through their legislative bodies and go through the procurement process within the 6 months allotted. WAC suggests a minimum of 48 months for such work in communities.
  - i. **Annual Reporting Requirement—Part I.3** MWRA already documents many of its O&M activities as EPA outlines in the permit. Our concern lies with the co-permittee/community capacity and budget for reporting so frequently. While many MWRA sewer communities are tracking and repairing their water and sewer pipe repairs, WAC’s assumption is that EPA is more interested in the work happening rather than the reporting. WAC strongly suggests that EPA allow communities more flexibility to spend limited funds on repairs and planning/scanning for repairs rather than annual reporting.
    - 1. WAC thinks an annual update, rather than an annual report, would be more feasible for communities.
- d. **Planning for Climate Change:**
  - i. Following Hurricane Sandy, WAC immediately asked MWRA to assess its vulnerability to sea level rise, more intense storm surges and rain. WAC saw then, and continues to see, MWRA’s concern with the potential impacts of these events on its infrastructure. Like EPA, WAC supports climate adaptation planning, resiliency, and mitigation. We all want a more resilient sewer system and far fewer overflows in the future.
  - ii. But we understand that the task of planning for and adapting to extreme weather and sea level rise under the most unfavorable climate change scenarios must involve every level of government working together. The survival of MWRA is dependent upon its communities’ survival and regional planning for “changes in precipitation, sea level rise, extreme weather events, coastal flooding, inland flooding”<sup>6</sup> and more. A regional and national effort is vital to meeting these highly challenging events.<sup>7</sup>
  - iii. Rather than inserting this requirement into NPDES permits, which in this case does not cover the entirety of the landscape that feeds into sewer overflows or the flooding of sewer infrastructure, WAC strongly suggests to EPA that they work regionally—with MassDEP, Metropolitan Area Planning Council (MAPC), and other regional entities to anticipate and plan for future major storms, recovery, and mitigation.

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<sup>6</sup> [Draft NPDES Permit No. MA0103284](#) (Deer Island Outfall) p. 31 footnote 3.

<sup>7</sup> WAC is not alone in suggesting a regional adaptation planning approach. BWSC called it out explicitly in its 2023 [Coastal Stormwater Discharge Analysis Report](#), p. ES-16 “Considering the broad scope and the substantial cost of constructing and maintaining these concepts, it may be prudent to consider the creation of new agency, consisting of multiple agencies/stakeholders (including the Commission) responsible for funding, maintaining, and operating solutions with regional benefits. Possible stakeholder entities for a new “Massachusetts Coastal Defense Agency” are illustrated in Figure ES-5”

iv. It is WAC’s understanding that EPA historically has worked closely with utilities and the public to properly vet new requirements in NPDES permits. Utilities-and co-permittees--need to be able to comply with permit requirements. Other organizations are questioning whether EPA can require such planning in discharge permits.<sup>8</sup> But if EPA wishes to require such plans in NPDES permits, WAC urges it to first work through the specifics in collaboration with the utilities and with a public comment process.

e. **Part I.E.1. Wastewater Treatment Facility O&M**

**Subpart a: WWTF Major Flood and Storm Events Plan**

WAC agrees that the MWRA should plan for major floods, storms, and sea level rise. MWRA does, as mentioned above, as part of routine facilities planning.

The issues WAC sees with this particular provision are the following:

- i. The costs for planning alone are potentially huge, and would displace needed investments in MWRA infrastructure or further impact the region’s Environmental Justice communities as sewer rates rise to unsustainable levels.<sup>9</sup>
- ii. EPA needs to ensure that its requirements are specific enough for MWRA to meet them within the required timelines.
- iii. EPA should give MWRA credit for having done planning for climate change in the planning and construction of Deer Island *more than 20 years ago*. This facility is built for up to 10 feet of sea level rise. MWRA has been doing climate planning ever since then, and WAC feels it is only fair of EPA to acknowledge and encourage that fact. A 5-year lookback penalizes MWRA for past planning.
- iv. The timeline is impractical. A 12-month deadline, not just for assessment of extreme storms out to 2123, not just for completion of a plan for MWRA facilities to adapt or move in the face of such weather, but also to begin to implement them is unrealistic. A minimum of 36 months should be allowed. (As noted below, communities have additional logistical and political hurdles and need even more time).<sup>10</sup>

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<sup>8</sup> “Under CWA § 301(b)(1), NPDES permits for clean water utilities must include effluent limits based upon secondary treatment technology, which are in no way related to these flooding and resiliency plans.: June 5 [comments on the Holyoke Pollution Control Facility](#) (Permit MA0101630), NACWA, p. 3

<sup>9</sup> May 5, 2023 [MWRA comment on draft NPDES permit for Billerica](#) (MA010711) “As written, the development of the plan would require hundreds of staff hours—thousands, in the case of a large or complex system—and is likely to have significant cost implications.” p. 4

<sup>10</sup> BWSC, to formulate the Stormwater Discharge Analysis cited above, took nearly 2 years just to run the computer models for roughly 30 storms. Adding new data increases the required computation time. The needed alternatives analysis will add even more computation time.



- v. Data sources are not fixed. Per the permit language, plans shall be adjusted “*as data sources used for such evaluations are revised, or generated.*”<sup>11</sup> As NACWA notes in its comments,<sup>12</sup> there are a wide variety of climate studies with variable projections. While EPA specifies the “13 federal agencies that conduct or use research on global change that contributed to the latest National Climate Assessment,” and “resiliency planning completed by the municipality” where facilities are located, and climate data from the Commonwealth,<sup>13</sup> WAC and EPA are aware that climate science continues to evolve. The permit later asks MWRA to “identify the source of data used,”<sup>14</sup> suggesting that these sources might not be definitive. EPA should be specific about the studies and years MWRA (and co-permittees) should use. If not, **WAC foresees third parties using conflicting data sources as a basis to sue MWRA** for not complying with the permit.
1. The requirement could be infinitely iterative. How often should MWRA write and revise such plans? That should be specified so that MWRA has time to implement these plans, rather than spending its energy and funds on continual revisions.
  2. In some final permits issued since May of 2023, EPA specifies data sources and tools (i.e. CREAT). MWRA has yet to use this tool, and EPA should work with MWRA before finalizing this permit to ensure that it is appropriate for Deer Island and the MWRA wastewater system.
- vi. It is reasonable to ask utilities to assess risks when replacing major facilities so that they are located and built to withstand future weather. It is not reasonable to ask that those facilities withstand events outside of their expected useful lives. Those assessments should be limited to the useful life of the facility, not beyond.
- vii. The annual report requirement is feasible, but again WAC asks EPA to consider whether it cares more about regular reports or a faster rate of implementation. MWRA already produces dozens of reports on regular schedules and keeps records of all meetings where infrastructure improvements--and the risk assessments upon which they are built--are discussed.

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<sup>11</sup> [Draft NPDES Permit No. MA0103284](#) (Deer Island Outfall) p. 31.

<sup>12</sup> June 5 [comments on the Holyoke Pollution Control Facility](#) (Permit MA0101630), NACWA

“An amorphous requirement that mitigation plans pertaining to climate change projections 80-100 years out be constantly modified ‘as data sources used for such evaluations are revised or generated’ flies in the face of the “finality” Section 402(k) [of the CWA} affords permittees...such a requirement instead injects extreme uncertainty for utilities...” p5

<sup>13</sup> [Draft NPDES Permit No. MA0103284](#) (Deer Island Outfall) p. 31, footnote 3.

<sup>14</sup> [Draft NPDES Permit No. MA0103284](#) (Deer Island Outfall) p. 33.

- viii. The requirement is unreasonable as written. This is a five-year permit. Major MWRA infrastructure is renewed on a 20-30-year cycle. Planning for weather and sea level rise in the mid-term (20-30 years) will be challenging. Planning for the long-term (80-100 years) is not useful—the models and the changes one can anticipate make such planning impossible to do with any accuracy.<sup>15</sup>
1. The obligation to develop measures to minimize flood and storm impacts, and determine their efficacy seems reasonable on its face. This is an area where communities, MWRA, EPA and other stakeholders need to work together to define terms, determine what weight to give the variables—efficacy, cost-effectiveness, how and whether to address impacts in the mid- and long-term, and in which plans, etc. As currently written, this section is not only novel, it is confusing.
  2. The requirements are vague. For instance, can EPA define
    - a. “Qualified individuals” who can help MWRA create these plans?
    - b. “Reasonable steps” to minimize harmful discharges
    - c. “At a minimum, worst-case data”?
    - d. If EPA uses the definitions that are in other final permits issued this year, that would be acceptable.

**f. Part I.E.2. Sewer System & Climate – Co-permittees**

In this section, EPA also includes co-permittees. WAC agrees that the region needs to plan for more intense rainstorms and flooding, as well as for sea level rise. MWRA and better-resourced municipalities have started planning for this future.

WAC again urges EPA to allow a regional approach via a different structure than a discharge permit as a more efficient and effective method for creating and implementing a climate plan. Having 43 different sewer communities engage in extensive flood planning ignores the regional nature of the issue, and the limited number of qualified contractors available to do the work. Sea level rise and flood waters will not differentiate between MWRA sewer communities and proximate communities; WAC would not want work that protects the MWRA and its tributary systems to negatively impact nearby municipalities.

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<sup>15</sup> NACWA “Asking utilities [and, WAC would add, communities] to predict their own vulnerabilities—and the weather—100 years from now...and to constantly modify those predictions over the course of the permit’s term...is the definition of arbitrary and unreasonable,” *ibid*, p. 6



**WAC again asks EPA to remove co-permittee language from the permit, but particularly from this section of the permit.**

- i. IF EPA wishes to retain co-permittees, WAC asks EPA to further revise this provision in collaboration with the affected municipal utilities and MWRA so that compliance with the final permit is feasible—both financially and in terms of regional capacity.
- ii. All the issues MWRA faces in climate planning apply for co-permittees. On top of those, there are additional issues for communities, including and not limited to the following:
  1. **The timeline** is particularly difficult. A 12-month deadline for assessment of the data, completion of a plan and starting implementation is challenging for MWRA. For communities, who have fewer staff and financial resources and flexibility than MWRA, as well as legislative logistics such as Town Meeting or voters who may not believe that climate change planning is as critical as police or school funding, such a timeline is near impossible. Communities will need at least 5 years and possibly longer; utility directors need to:
    - a. educate their legislative bodies (city council/town meeting),
    - b. convince them to fund the plan, and once funding is secured,
    - c. go through procurement and the various elements EPA has specified.
- iii. EPA or the Federal Government will have to provide much richer and quicker funding, than it has to date—both for planning and to extend sewer repairs beyond the municipal system and into service lines. This funding also needs to be available more readily (i.e., not through state Clean Water Funds or Sewer Revolving Funds). Without such funding, communities will be putting needed sewer work on hold in order to meet the planning requirements.
- iv. The number of contractors qualified to do this work is limited. That will put all 43 communities in competition with each other and MWRA, unless the timeline is extended, or EPA can devise or allow regional solutions
- v. Asking 43 communities to make separate flood plans is inefficient (maybe impossible). Storms and floods do not recognize municipal boundaries and work in one area can affect another. Having each municipality work independently on flood modeling will delay implementation. The communities within and adjacent to MWRA's sewer shed need to be working together on climate plans. Some of this work has been taken on by the watershed organizations and MAPC, but is limited.
- vi. This planning should be done, at a minimum, at the watershed level. The Metropolitan Area Planning Council, and Charles River, Mystic River, and Neponset River watershed associations have started this work with

their municipalities, but a lack of resources has hampered the filling in of more detailed, prioritized, and executable plans. EPA has promoted watershed planning in other spheres, and WAC believes it should do so here also.

For all these reasons, WAC asks EPA to remove or modify these provisions from the draft permit and instead engage with MWRA, the Commonwealth, MWRA sewer communities, MAPC and other stakeholders to find feasible and equitable climate mitigation strategies.

Again, thank you for your attention to our comments and requests.

Sincerely,

A handwritten signature in blue ink, appearing to read 'Kannan Vembu', with a long, sweeping horizontal stroke extending to the right.

Kannan Vembu, Chair  
For the Wastewater Advisory Committee